

# Beschussamt Mellrichstadt

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11 OKTOMVRI-EUROKOMPOZIT AD  
Aleksandar Makedonski 2/42

MAK-7500 Prilep

## Test Report

Determination of the V-50 ballistic limit for body protection material according to STANAG 2920.

Report-no. : 12V133B01#, to order-no.: 8039  
Test date ...: 09.05.2012  
Tester .....: Volkheimer

Applicant : 11 OKTOMVRI-EUROKOMPOZIT AD  
Manufacturer : 11 OKTOMVRI-EUROKOMPOZIT AD  
Sample : sample 2  
Part-no. : -2-

The V-50 ballistic limit is determined by the average of an equal number of highest partial penetration velocities and the lowest complete penetration velocities which occur within a specified velocity spread.



Willner

Mellrichstadt, 11.05.2012

The test results are only valid for the samples described in this test report.  
The applicability of this test report is restricted to five years from the date of testing. It will expire prematurely, if any alteration or modification to the manufacturing process, materials and/or quality management system could impact the product conformity.  
This test report is only valid with the correspondence of the report numbers on all pages and with the official seal.  
Duplication in extracts of this report is only allowed with written approval of the Beschussamt Mellrichstadt.

Description of the sample in shooting direction (specification of the manufacturer):

4,5mm macrolon pane

Dimensions of the sample (mm): 400 x 400  
 Determined aerial density (g/dm<sup>2</sup>): 58,9

Test conditions:

Calibre .....: 5,385mm  
 Bullet type .....: acc. to STANAG 2920 A3/6723/1  
 Bullet mass .....(g): 1,102  
 Weapon .....: test barrel cal. .30, twist length 20 inch  
 Barrel length .....(mm): 650

Shooting distance .....(m): 3,80  
 Angle of incidence (degree): 90 (0° NATO)

Room temperature .....(°C): 22  
 Humidity .....(%): 45  
 Sample temperature.....(°C): 20

Conditioning of the sample:  
 24 Stunden bei 20 +- 2 grd C Temperatur und 65 +- 5 % rel.Feuchte

Results:

hit no.	partial penetration			hit no.	complete penetration		
	V(2,30) [m/s]	[fps]	E(2,30) [J]		V(2,30) [m/s]	[fps]	E(2,30) [J]
10	248,0	813,6	33,9	9	256,0	839,9	36,1
8	249,0	816,9	34,2	7	261,0	856,3	37,5
2	251,0	823,5	34,7	4	262,0	859,6	37,8
6	252,0	826,8	35,0	3	266,0	872,7	39,0
5	260,0	853,0	37,2	1	267,0	876,0	39,3
average	252,0	826,8	35,0	average	262,4	860,9	37,9

V-50 Ballistic limit:	[m/s]	[fps]	E-50 [J]
instrumental velocity	V = 257,2	843,8	36,4
velocity loss	VL = 4,3	14,1	
<b>striking velocity</b>	<b>VS = 252,9</b>	<b>829,7</b>	<b>35,2</b>